The theory of rate-making that would charge exact cost to the user each year, so that there would be no injustice to different users, should make it just as wrong to charge a rate below the full cost at any time as to charge a rate above the cost. Mr. Hayes admits, however, frankly enough, on p. 190, that "companies furnishing a public service have found it extremely difficult if not impossible to raise rates; rates could be lowered, but when once lowered they could not in most instances be increased." This is a blow to the theory of mutual obligations and there is no doubt of its truth. Moreover, if it is true, the question of additional capital for extensions of service becomes at once vital in the case of enterprises that have had rates reduced because based on a valuation less than cost new. Investors cannot on the reduced rates get a fair return and they must depend upon rates being immediately increased after their new contribution of capital. If this increase is uncertain, development is prevented.

Courts find it easier, in their problems, to take flashlight pictures of the conditions to which they apply the law; but regulation of rates for the sake of best results is a problem in dynamics, not statics. It has to do with movement, growth, development, as well as past history and present conditions. Even present users of utilities are greatly interested in the future and it will hardly satisfy them to go without extended future service because perhaps contributions of former users are not in the place that the theory of "guaranty by reserves for renewals" requires.

It may not always be possible to do full justice to those who have gone before. It is possible to see that justice is done in the future, and this justice would seem to be most completely done by making rates that will take care of future growth while specifying the ways that the proceeds from these rates shall be used so that continuity of the service will be assured.

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Railroads: Finance and Organization. By WILLIAM Z. RIPLEY. New York: Longmans, Green & Co., 1915. 8vo, pp. xix+638. $3.00 net.

This valuable and comprehensive treatise is a companion volume to the author's *Railroads-Rates and Regulation*, published in 1912. The earlier work considered the theory of rates, the main features of the

American rate structure, problems of discrimination, and federal legislation on the subject of rates since 1887. The present book discusses construction finance, the nature and issue of securities, security prices, stock-watering, receiverships and reorganizations, intercorporate relations, combination, valuation, reasonable rates, and some other topics. The two together form very probably the most important contribution to non-technical railroad literature made in recent years.

The author's fundamental thesis in respect to finance is that the amount of securities outstanding should not exceed the investment in the plant. Cost and investment, investment and corporate estate, coincide, and so should corporate estate or capital and capitalization or securities outstanding. Neglect of this equivalence burdens the corporation with excessive charges, if the excessive securities be bonds, and in any case hinders the proper development of the property from earnings, and facilitates manipulation and speculation by depressing market values. In comparison with these results, the effect of overcapitalization upon rates, if there be any effect, is unimportant. Once an accurate statement of investment is secured, rates may be adjusted to yield a fair return on this figure, and the difficulties incident to valuations based on estimated costs of reproduction may be avoided. With efficient regulation, earnings may be made to depend on "fair value," instead of value being dependent upon earnings. It may be observed that this resembles the practice in California, where it has been argued that the development costs of new businesses may be considered to be equal to the difference between actual earnings during the early years and the percentage return which the Railroad Commission deems reasonable.

The importance of the book consists, however, quite as much in the unusual amount of information relative to the financial practices of American railroads which the writer has brought between two covers as in the theoretical conclusions reached. Those acquainted with Professor Ripley's activities as a teacher have long been familiar with his command of current sources of information, his complete knowledge of secondary literature, and his power of organizing and summarizing complex masses of fact. These are characteristics shown at their best in this, his most recent, work. Among special topics, attention should be called to the discussion of combination on pp. 456–578, which is the best analysis yet published of conditions in the New England, trunk line, anthracite, western, and far western territories accompanying the growth of the

more important railroad groups. Mention may also be made of the excellent chapter on bonds, and of the systematic treatment of stock-watering. It has been a genuine pleasure to the reviewer to find that certain conclusions relating to railroad reorganizations, which he arrived at in a monograph published several years ago, have been confirmed by the author's later study.

How far the fundamental positions of the author in matters of railway finance will be accepted, time alone can tell. The reviewer is still inclined to believe that valuations based on original investment raise problems no less puzzling than those based on cost of reproduction. And it seems to him that the question whether capitalization should be limited to investment depends altogether upon whether investment is selected as a basis for rates; so that the equation "stock and bonds equal cash paid in" has no especial independent claim to respect. Nor would he agree, for instance, to an unqualified condemnation of stock dividends—to take a practice which Ripley denounces root and branch, because it represents an increase in capitalization without an increase in investment. It seems clear that the legitimacy of the dividend in such cases depends upon the legitimacy of the distribution, not upon the method employed. If the surplus exists, and is properly distributable, why should this particular means be prohibited? For, to follow somewhat the lines of the author's discussion:

1. The liabilities of the company are not increased, if the surplus be at the same time written down.

2. The change of a book surplus into a stock liability makes for intelligent publicity, in that the par value of the outstanding stocks and bonds comes more nearly to approximate the real value of the property than was the case before the dividend occurred. It is here assumed that earnings have been used for betterments, or that for some other reason a permanent increase in earning power has taken place.

3. No heavier burden is saddled on patrons of the road, unless courts and commissions do the unexpected, and substitute for their cost-of-reproduction and original-investment theories the principle of allowing a fair return on the par of the outstanding capitalization.

The reviewer recalls a recent attempt of the United Railroads of San Francisco to reduce their outstanding stock issue without writing down their assets, and to declare a dividend from the increased surplus which thus automatically resulted. Could anything have been farther removed from a stock dividend, and could anything have been more unsound,

granting, what was the fact, that the stock of the United Railroads represented in the main only water?

Much difficulty arises in these matters because of the inconsistency and incompleteness of the rules of our regulating bodies. This was the fact in the Kansas City Southern case, cited by Ripley on p. 234. In this case the Kansas City Southern desired to improve its line by the reduction of grades, etc. If it had smoothed and straightened its original line, at a cost of $1,230,318.99, it could have charged the whole amount to capital under the accounting rules of the Interstate Commerce Commission. It so happened that an equivalent reduction in grades could be obtained by a relocation of a portion of the line at a cost of $629,399.74, or materially less. But, apparently to its surprise, the railroad discovered, after it had selected the second alternative, that it could charge to capital account only that portion of the cost of relocation which exceeded the investment in the original and now abandoned line, or $234,747.74. The position of the Commission that depreciation in the property from abandonment of the main line should be considered was undoubtedly sound. But a better rule would have allowed in each instance the capitalization at some accepted rate of interest of the gain in net earnings to be reasonably expected either from relocation or from direct improvement.

The statements of fact throughout the book have evidently been carefully checked. The reviewer has found a few errors or misprints, but mostly of the sort that no amount of proofreading seems able to prevent. Perhaps attention should be drawn to the assertion that the Supreme Court, by its "rule of reason" decision, imposed upon itself the task of drawing the line between good monopolies and bad (p. 559). Is this certainly true? The reviewer has always understood that the Supreme Court held all monopolies to be bad, and used the rule of reason to distinguish between restraints of trade which led to monopoly and restraints which did not.

The volume under review was not prepared as a textbook, but one may hope that it will be used in college instruction in connection with the author's *Railway Problems.* If this proves to be the case, Professor Ripley will have the satisfaction of rounding out work which he began as an inspiring teacher and a constructive editor, with a text which will improve throughout the country the teaching of the subject in which his interest lies.

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